

Inweld 320LR

Alloy ER320LR

AWS A5.9



Description and Applications:

ER320LR weld metal deposits have the same basic composition as that deposited by ER320; however, the elements of C, Si, P, and S are specified at lower maximum levels, and Cb (Nb) and Mn are controlled within narrower ranges. These changes reduce the weld metal fissuring (while maintaining the corrosion resistance) frequently encountered in fully austenitic stainless steel weld metals. Consequently, welding practices typically used for austenitic stainless steel weld metals containing ferrite can be used in bare filler metal welding processes such as gas tungsten arc and gas metal arc. ER320LR has been used successfully in submerged arc overlay welding

Chemical Composition of Silicon Bronze ERCuSi-A

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Cb
Balance	0.025	19.0-21.0	32.0-36.0	2.0-3.0	1.5-2.0	0.15	0.015	0.02	3.0-4.0	8 x C min/0.40 max

Single values are maximum unless otherwise specified.

Tensile Strength, min: 86,000 (psi), 590 (mpa)

Yield Strength: 57,500 (psi), 400 (mpa)

Elongation, min %: 35



Recommended Welding Parameters:

	Wire Diameter	Amperage
GMAW Direct current; Electrode +Ve 98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO Gas Flow: 30 to 50 CFH Voltage: 29 to 33	0.035" (0.9 mm)	160-180
	0.045" (1.14 mm)	180-220
	1/16" (1.6 mm)	210-250

GTAW Direct Current; Electrode -Ve
100% Argon
Gas Flow: 30 to 40 CFH